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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/727,564      | 12/05/2003  | Frederick M. Minitier | 22216-00001-US      | 9129             |

30678 7590 09/29/2006

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| EXAMINER |
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GILBERT, WILLIAM V

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| ART UNIT | PAPER NUMBER |
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3635

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |  |  |
|------------------------------|---------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/727,564  | <b>Applicant(s)</b><br>MINITER, FREDERICK M. |  |
|                              | <b>Examiner</b><br>William V. Gilbert | <b>Art Unit</b><br>3635                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 2 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This is a First Action on the Merits. Claims 1-17 are pending and were examined as noted below.

#### *Specification*

1. The use of the trademark RENOFIL (Page 4, line 10) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claims 2 and 12 are objected to because of the following informalities: use of the language BST. While it is noted in the specification Page 4, line 25 that BST are Polystyrene Beads, the Examiner suggests that the actual word(s) for which BST represents be noted. Appropriate correction is required.

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***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 5, 6, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boehning (U.S. Patent No. 5,930,964) in view of Hunt (U.S. Patent No. 5,713,176).

Regarding Claim 1, Boehning discloses a dwelling wall with a structural frame with studs (Figure 7, generally) and an outer layer of lightweight concrete panels (51; Column 6, lines 33, 34). Boehning does not disclose noggings and an inner layer of plasterboard liner. Hunt discloses a frame with noggings (Figure 1, element 111) and a plasterboard inner layer (Column 4, lines 64-67). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to place noggings and plasterboard in the frame in Boehning as disclosed in Hunt because it is well known in the art to use noggings and plasterboard in the framing of a structure. Further, Boehning does not disclose the density of the concrete

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mix in the range of 500-1500kg/m<sup>3</sup>. It would have been obvious as a matter of design choice to make the concrete panel in Boehning with this density because such range is well known in the art. Further, Applicant failed to disclose a criticality of this density and the panel in Boehning is capable of being made with concrete of this density.

Regarding Claim 5, Boehning discloses the concrete panel's having a polystyrene backing attached (Figure 1b, element 1; Column 12 lines 20-23).

Regarding Claim 6, Boehning discloses the claimed invention except for the specific dimensions for the concrete panel and polystyrene backing. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to make the panel in Boehning with these dimensions. Furthermore, Applicant failed to disclose a criticality for these dimensions and the panel in Boehning is capable of being made with these dimensions.

Regarding Claim 7, Boehning discloses the panel's first edge having a groove (Figure 1b, element 6a) and the second edge having a tongue (6).

Regarding Claim 8, Boehning discloses a panel clip (Figure 7c, element 33) affixed to the frame and engaged with the concrete panels.

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**Claims 2-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boehning and Hunt as applied to claim 1 above, and further in view of Bouscal et al. (U.S. Publication 2005/0014034).

Regarding Claim 2, Boehning and Hunt disclose the claimed invention except that the concrete panels are made of cement, sand, BST (polystyrene beads) lightweight concrete aggregate, superplasticiser and water. Bouscal discloses a panel (Figure 7, generally) made of cement (paragraph 0009), sand (paragraph 0030 line 6), BST (polystyrene beads) lightweight concrete aggregate (paragraph 0030, line 1), superplasticiser (paragraph 0012) and water (paragraph 0014). It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to make lightweight concrete used in Boehning with these items. Boehning is concerned with providing a lightweight brick or tile that is easy to manufacture (Column 4, lines 11-12) and highly resistant to damage from airborne objects (Column 3, lines 60-62). Bouscal et al. teaches a lightweight board with improved ease of manufacture (page 2, paragraph 0044) and resistance to inclement weather (page 2, paragraph 0050).

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Regarding Claims 3 and 4, Boehning in view of Hunt disclose the claimed invention except the specified range for a superplasticiser/cement ratio (per Claim 3) or a water/cement ratio (per Claim 4). Bouscal discloses a superplasticiser/cement ratio within the range of 0.5-1.5% by weight (paragraphs 0009, 0012, where 60% of Portland cement and 7% of the superplasticiser will be within the range claimed), and a water/cement ratio within the range of 0.30-0.35 by weight (paragraph 0014). It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to make the panel used in Boehning with the ratios as disclosed in Bouscal. Boehning is concerned with providing a lightweight brick or tile that is easy to manufacture (Column 4, lines 11-12) and highly resistant to damage from airborne objects (Column 3, lines 60-62). Bouscal et al. teaches a lightweight board with improved ease of manufacture (page 2, paragraph 0044) and resistance to inclement weather (page 2, paragraph 0050). Furthermore, Applicant failed to state a criticality for the necessity of these composition ratios.

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**Claims 9-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boehning and Hunt as applied to claim 1 above, and further in view of Adams (U.S. Patent No. 3,867,244).

Regarding Claims 9-11, Boehning and Hunt disclose the claimed invention except for a foil member between the studs and noggings (per Claim 9), the foil is a concertina bat (per Claim 10) and having a foil member between the panels and the frame (per Claim 11). Adams discloses a structure with a concertina foil bat sandwiched between two panels (Figure 2, generally; Column 2, lines 60-63; element 22). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a foil bat within the frame of Boehning because it is well known in the art that foil batting aids in the insulation of a structure. Regarding Claim 11, Claim 11 depends from Claim 1 yet claims a second foil member (Claim 11, line 1). The result is still a single foil member in the structure and the Examiner treated it accordingly, thus the foil in Adams meets the Claim.

**Claims 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouscal.

Regarding Claim 12, Bouscal discloses a panel (Figure 7, generally) made of cement (paragraph 0009), sand (paragraph 0030



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line 6), BST (polystyrene beads) lightweight concrete aggregate (paragraph 0030, line 1), superplasticiser (paragraph 0012) and water (paragraph 0014). Bouscal does not disclose the density of the concrete mix in the range of 500-1500kg/m<sup>3</sup>. It would have been obvious as a matter of design choice to make the concrete panel in Bouscal with this density because such range is well known in the art. Furthermore, Applicant failed to disclose a criticality of this density and the panel in Bouscal is capable of being made with concrete of this density.

Regarding Claims 13 and 14, Bouscal discloses a superplasticiser/cement ratio within the range of 0.5-1.5% by weight (paragraphs 0009, 0012, where 60% of Portland cement and 7% of the superplasticiser will be within the range claimed, per Claim 13), and a water/cement ratio within the range of 0.30-0.35 by weight (paragraph 0014, per Claim 14).

**Claims 15, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouscal as applied to claim 12 above, and further in view of Schneller (U.S. Patent No. 4,578,915).

Regarding Claim 15, Bouscal discloses the claimed invention except the concrete panel's having polystyrene backing attached. Schneller discloses an exterior wall panel with a concrete surface (34) and polystyrene backing (22; see Abstract line 2,

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3). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to place a polystyrene backing on a concrete panel because it is known in the art that these backings have excellent insulation properties.

Regarding Claim 16, Bouscal in view of Schneller disclose the claimed invention except for the specific dimensions for the concrete panel and polystyrene backing. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to make the panel in Boehning with these dimensions. Furthermore, Applicant failed to disclose a criticality for these dimensions.

**Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over Bouscal as applied to claim 12 above, and further in view of in view of Rabassa (U.S. Patent No. 4,314,431).

Regarding Claim 17, Bouscal discloses the claimed invention except for a tongue and groove. Rabassa discloses a concrete panel (10) with a tongue (Figure 1, element 6) and a groove (5). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to place a tongue and groove on the panel in Bouscal as in Rabassa because it is known

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to use this connection for forming a better seal between adjacent panels.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Naoko Slack can be reached on 571.272.6848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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27 Sep 2006



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